TREATING COMPLEX CASES

The Cognitive Behavioural Therapy Approach

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Chapter 5

COGNITIVE BEHAVIOURAL TREATMENT FOR COMPLICATED CASES OF POST-TRAUMATIC STRESS DISORDER

Matthew O. Kimble, David S. Riggs* and Terence M. Keane**

INTRODUCTION

Working with patients who have experienced traumatic events is inherently complicated. The predominant psychological effects of trauma exposure encompass a wide range of signs, symptoms, and behaviours that are subsumed under the diagnosis of Post-traumatic Stress Disorder (PTSD; American Psychiatric Association, 1994). However, in survivors of trauma, psychological problems are not limited to those captured in the PTSD diagnosis. A substantial number of individuals with PTSD experience coexisting psychological disturbances including mood and anxiety disorders, personality change, substance abuse, and problems with anger, rage, and aggression (Kulka et al., 1990; Keane & Kaloupek, 1997). Difficulties for survivors of trauma often extend beyond strictly psychological issues; the biological sequelae to trauma include biochemical and perhaps structural changes in the brain (Bremner et al., 1995; Yehuda & McFarlane, 1997); the social sequelae of trauma include isolation, increased interpersonal conflicts, feelings of detachment, and generally poor occupational and social functioning (Kulka et al., 1990; Hearst, Newman & Hulley, 1986; Resick et al., 1981). Ideally, sound treatment of trauma patients addresses problems in each area. Practically, implementation of such a comprehensive approach presents numerous therapeutic challenges.

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In our experience, it is the presentation of numerous concurrent clinical concerns that makes a particular PTSD treatment case 'complicated.' While there exist widely researched and experimentally validated psychosocial treatments for PTSD (e.g. Foa et al., 1991; Keane, 1997; Keane et al., 1985; Resick & Schnicke, 1992), in those cases of PTSD complicated by other problems, it can be difficult to implement these treatments. In such cases, treatments targeted towards PTSD symptoms should be augmented with other approaches so that a client's concerns are comprehensively addressed. In this chapter, we will present a behaviourally based approach to the assessment and treatment of complicated cases of PTSD. The chapter will review the relevant theory and research that support such an approach, discuss the methods for assessment in such cases, and outline how to utilise empirically validated treatments for PTSD and associated problems. Additionally, the chapter will place the proposed assessments and treatment strategies among the broader context of therapeutic and extra-therapeutic issues that add to the difficulty of treating many PTSD cases.

Case Study

To illustrate the challenges in working with complicated cases of PTSD and to provide a basis for discussion later in the chapter, we will describe the case of Mr Robert J. Mr J. is a 48-year-old Caucasian male Vietnam veteran who presented at our clinic with complaints of combat-related nightmares, sleep difficulties, elevated startle response, hypervigilance, social isolation, anger problems, and suicidal thoughts. Our initial evaluation identified a number of other problems including marital distress, unemployment, and chronic pain in his legs and lower back. Further assessment revealed the presence of alcohol abuse and depression with borderline and antisocial personality characteristics.

Mr J. served almost two full tours of duty (22 months) in Vietnam as a Marine infantryman. He was discharged from the military secondary to combat-related injuries to his legs. Upon his return from Vietnam, he did not work for a year while recovering from his injuries. At that time, he began to drink in order to quell the pain in his legs and to help him sleep. After a year, he obtained work with a family friend and thereafter worked odd jobs for the next 22 years. He often drank on the job and was involved in frequent altercations with coworkers. He married, had two children, was divorced after 3 years, and then remarried 10 years later. Five years prior to presenting at our clinic, Mr J. lost his job due to company restructuring; he had not worked since. His drinking and PTSD symptoms became worse subsequent to his job loss. Both Mr J. and his wife reported an increase in conflict within the family over the

last few years with a dramatic increase in the past 6 months. Both reported violent altercations in the past although, none resulted in injuries that required medical attention. At the time of evaluation, Mr J.'s wife was threatening to end the relationship, but feared doing so because of Mr J.'s potential for suicide.

As in the case of Mr J., trauma survivors can present a range of simultaneous psychosocial concerns; however research suggests that systematic analysis and treatment can ameliorate even the most complex combinations of problems. The results of randomised, controlled clinical studies indicate that trauma victims can experience relief from treatments focused on the alleviation of core PTSD symptoms (Keane et al., 1989a; Foa et al., 1991; Resick & Schnicke, 1992; Davidson & van der Kolk, 1996). In addition, empirically validated treatments for many of the concurrent problems such as substance abuse, depression, social isolation, chronic pain, marital distress, and violence are available. However, in cases such as that of Mr J., the presence of multiple serious problems may compromise the effectiveness or even contraindicate specific treatments for any individual problem. However, the conceptual framework provided by cognitive behavioural theory provides the therapist with a therapeutic strategy for even these most difficult cases.

COGNITIVE BEHAVIOURAL THEORY AND RESEARCH IN PTSD TREATMENT

The central role of anxious arousal and avoidance in PTSD and the presence of identifiable conditioning events led several authors to propose learning theories of PTSD based on Mowrer's (1947, 1960) Two-Factor Theory (Kilpatrick, Veronen & Resick, 1982). According to this theory, anxiety is conditioned to previously neutral cues present at the time of the traumatic event. Through generalisation and higher order conditioning, this arousal becomes associated with a broad range of stimuli. Avoidance behaviours, including avoidance of reminders of the trauma and detachment from others, develop in response to the anxiety and are reinforced by the reduction in arousal associated with their use. The persistence and generalisation of these avoidance behaviours contribute to broader deficits in functioning and can maintain these debilitating symptoms.

Two-factor theory contributed substantially to our understanding of PTSD and importantly led directly to the development of interventions for the disorder (e.g., Foa et al., 1991; Keane et al., 1985), however it has a number

of limitations. In particular, a theory of human psychopathology that does not give a central role to cognitive processes such as attention, memory, and intrusive thoughts will necessarily be limited in its conceptual understanding of PTSD patients. In part to address some of these issues, theories of trauma reactions based on cognitive and information-processing models have been proposed (e.g. Chemtob et al., 1988; Foa & Riggs, 1993; Litz & Keane, 1989; McCann & Pearlman, 1990). Generally, these models propose that PTSD influences how an individual appraises the world, themselves, and others and provides specific predictions regarding behavioural and cognitive changes that occur when that individual interacts with the environment. Although information processing theories are useful in understanding aspects of post-traumatic reactions, their relatively recent development has limited their contribution to interventions for PTSD. One notable exception is the Cognitive Processing Therapy developed by Resick and her colleagues (Resick & Schnicke, 1992; Calhoun & Resick, 1993; Weaver, Chard & Resick, Chapter 16, this volume).

As described earlier, cognitive behavioural treatments for PTSD have focused primarily on the central role of anxiety and other aversive emotional states. Although several specific forms of cognitive behavioural treatments for PTSD have been developed, most have evolved from, or incorporated aspects of, empirically tested treatments for other anxiety disorders. Examples include variations of direct therapeutic exposure (e.g. Foa, et al., 1991; Boudewyns, et al., 1990; Keane et al., 1989a), Anxiety Management Training (e.g. Foa, et al., 1991; Keane et al., 1989a; Kilpatrick, Veronen & Resick, 1982) and combinations of the two (e.g. Resick & Schnicke, 1992).

Direct therapeutic exposure (e.g. desensitisation, flooding, prolonged exposure) successfully reduced PTSD symptoms in studies of rape victims (Foa et al., 1991) and combat veterans (Boudewyns et al., 1990; Keane et al., 1989a). Descriptions of such treatments are available in the literature (Lyons & Keane, 1989; Foa et al., 1991; Keane et al., 1994) and the reader is directed to these sources for a fuller explanation of these techniques. In brief, therapeutic exposure requires the client to directly confront traumatic cues and/or memories within the supportive context of the therapeutic relationship. Typically, this involves the client repeatedly relating the events of the trauma imaginally and verbally to the therapist. It has been argued that for exposure therapy to be optimally effective, the client must experience the aversive emotions associated with the memories as well as stimulus response and meaning components of the memory (Foa & Kozak, 1986; Lang, 1977). Prolonged presentations of the memory repeated multiple times inexorably lead to anxiety reduction and can even change cognitive appraisals of the event.

Anxiety Management Training (AMT), a term that describes a number of interventions targeted at improving an individual's ability to cope with anxiety symptoms, is also effective in reducing PTSD symptoms when used alone (Kilpatrick, Veronen & Resick, 1979; Foa et al., 1991). The most well studied of these approaches is Stress Inoculation Training (SIT: Meichenbaum & Jaremko, 1983) which was adapted by Kilpatrick, Veronen and Resick (1982) to address the needs of rape victims. SIT teaches strategies to address difficulties in each of three 'channels' where anxiety may manifest itself: the physical and autonomic channel, the behavioural or motoric channel, and the cognitive channel. Typical skills include muscle relaxation and breathing re-education for the physical channel, covert modelling and role-playing for the behavioural channel, and guided self-dialogue for the cognitive channel. Skills training can also include problem-focused groups that educate and teach skills associated with particular problems common to individuals with PTSD such as anger, assertiveness, communication, relationship distress, parenting difficulties, and poor social skills.

Resick and Schnicke (1992) have developed an effective cognitive behavioural treatment for rape survivors termed Cognitive Processing Therapy (CPT) that includes elements of both direct therapeutic exposure and anxiety management. CPT is a structured 12-session approach that relies heavily on cognitive restructuring techniques to alter cognitive distortions common among rape trauma survivors. CPT also includes direct exposure to the traumatic cues via the client's written descriptions of the event. According to the theory underlying this treatment, CPT improves on exposure techniques by addressing not just fear but also other feelings such as guilt, anger, and hopelessness (Resick & Schnicke, 1992).

Another recent development in the cognitive behavioural treatment of PTSD is Eye Movement Desensitisation and Reprocessing (EMDR: Shapiro, 1989, 1995). This largely atheoretical therapy has shown some promise in reducing PTSD symptoms (Boudewyns & Hyer, 1996; Wilson, Becker & Tinker, 1995), although other researchers have found no difference between EMDR and no treatment (Renfrey & Spates, 1994; Jensen, 1994). EMDR shares a number of treatment elements with well established cognitive and exposure therapies. For example, clients are asked to recall the events of their trauma, monitor physiological responses to the memory, and identify alternative cognitive appraisals of that memory. The treatment also prompts the client to engage in repeated sets of lateral eye movements while focusing on initial reactions and the therapeutic alternative cognition in treatment. The extent to which any one of these elements contributes to recovery is the focus of much controversy and requires further investigation (Keane, 1997).

The development of effective cognitive behavioural treatments for the symptoms of PTSD has clearly helped trauma survivors; however, the utility of such techniques when they are employed with patients suffering from multiple co-morbid psychological conditions and psychosocial problems, as in the case of Mr J., remains uninvestigated. Clearly, the presence of problems other than PTSD complicates the provision of these therapies to many traumatised individuals. For example, it is possible that problems other than anxiety are central to a given patient's impairment. Thus, anxiety reduction/management techniques may not address the client's primary problems or, more seriously, may exacerbate the client's current problems. Under these circumstances, the patient's additional problems need to be identified, prioritised, and successfully treated with available techniques.

Dealing with the many clinical issues presented by PTSD patients with concurrent diagnoses and psychosocial problems can be daunting for even the most experienced therapist. The lack of a single clear point of intervention, coupled with the typical clinician's desire to alleviate all of the survivor's problems, may lead the clinician to errantly engage in a series of unsystematic attempts to deal with multiple problems simultaneously (or at least those that are most predominant on any given day). Alternatively, clinicians may experience a sense of therapeutic helplessness in which they intervene inadequately in one area out of concern for exacerbating other existing problems. In the balance of this chapter, we will present a cognitive behavioural framework for conceptualising the assessment and treatment of complicated cases of PTSD that will provide therapists with points for intervention in these complex cases.

A CBT APPROACH TO COMPLICATED PTSD CASES

Cognitive behavioural therapy encompasses a variety of techniques designed to address the varied psychological and behavioural problems presented by clients. These techniques share several common elements that define the approach and guide intervention (Rimm & Masters, 1979). Among these common elements are three that will serve as the basis for the approach to PTSD outlined in the present chapter. First, the therapist assumes that maladaptive behaviours are, to some extent, learned and that learning principles can be effective in modifying these behaviours. Second, the therapist places value on obtaining empirical support for the efficacy of his/her interventions. Third, the therapist adapts the method of treatment to the client's problems.

In addition to these elements, the approach that we outline reflects a basic

problem-solving philosophy regarding clinical decision making and intervention (Barlow, Hayes & Nelson, 1984; Barlow & Hersen, 1984; Nezu & Nezu, 1989). Within this approach, the clinician develops hypotheses as to the stimuli, responses, contingencies, and cognitive processes that serve to maintain the maladaptive behaviour and cognitions. During treatment, these hypotheses guide the implementation of specific interventions and lead to predictions about the results of these interventions. Data are collected over the course of treatment to evaluate the effectiveness of interventions and provide feedback to the clinician to further shape hypotheses. When data are consistent with a clinician's hypothesis, interventions continue based on that hypothesis. If the effects of any intervention are not as predicted, then the clinician generates a new hypothesis to guide future interventions. Thus, cognitive behavioural interventions are seen as a series of single case experiments in which hypotheses are developed, variables are manipulated through specific interventions, data are collected, predictions evaluated, and results guide future interventions.

When faced with a trauma survivor presenting with multiple problems, the therapist develops simultaneous hypotheses to account for the complex interrelations of symptoms, other problems, and a variety of maintaining factors. At present, considerable emphasis in behavioural formulations of PTSD is placed upon the role of anxiety and avoidance. These formulations hypothesise that patients are at least partially successful in avoiding anxiety through the use of various behavioural and cognitive strategies (e.g. withdrawal, dissociation). However, these avoidance techniques also contribute to the patients' failure to engage in the emotional processing during treatment that is thought necessary to recover from a traumatic event (Foa & Riggs, 1993; Keane et al., 1989a). Thus, behaviourally based therapies have tended to focus on the reduction of avoidance and escape strategies using techniques such as exposure therapy and response prevention. However, this conceptualisation, with its emphasis on the role of anxiety and avoidance, minimises other potential aetiologic and maintaining factors for the concurrent problems.

Although we do not wish to downplay the meaningful role of anxiety in the development of PTSD, we encourage a broader perspective that carefully assesses the extent to which anxiety plays an aetiologic or maintaining role across all functional problems. Remaining aware of four logical possibilities in the relationship between trauma-related anxiety and other problems, clinicians might consider that:

1. The problems arose from and are maintained by the need to manage/control anxiety.
2. The problems arose in response to the anxiety, but are currently maintained by other factors.

3. The problems arose from and are maintained by factors unrelated to anxiety.
4. The problems arose for some reason unrelated to anxiety, but are maintained because they help manage/control anxiety.

Anxiety, therefore, is only one of many aetiologic and maintaining factors that may contribute to current problems and should not automatically become the sole focus of treatment. Indeed, to plan effective interventions for patients with PTSD, therapists must evaluate the role of many factors that could potentially maintain problematic behaviours. In addition, the complexity of these cases requires therapists to recognise the potential for particular interventions to have multiple effects, some positive and some negative. However, by more completely addressing the interrelations of a patient's problems, this approach holds the promise of producing more meaningful and lasting changes.

The Phasic Model for PTSD Treatment

This problem-solving philosophy, when utilised with individuals with multiple problems, leaves a therapist with numerous potential areas of intervention. One way to manage these complexities is to outline a series of treatment priorities to limit the issues that must be addressed at any one point in time. Elsewhere, Keane and his colleagues have outlined a flexible, phase-oriented approach to therapy with traumatised individuals (Keane, 1995; Keane et al., 1994). This conceptualisation of treatment is useful in its recognition of the phasic nature of PTSD and the importance of matching specific interventions to the current needs of the patient.

The phase-oriented approach to PTSD treatment delineates six phases that describe the course of therapy with adult trauma survivors. The *emotional and behavioural stabilisation phase* focuses on the management of the crisis that typically initiates the patient entering therapy and assures that the patient has adequate resources and skills to meet basic needs and to remain safe. During *the trauma education phase*, the clinician provides the patient with information regarding the consequences of exposure to traumatic events and the development of PTSD symptoms. The *stress management* phase focuses on the teaching of skills to help patients cope with stress, anxiety and interpersonal problems. The *trauma focus phase* emphasises the use of specific techniques, usually exposure-based, to alleviate the anxiety-related symptoms of PTSD. In the *relapse* prevention phase the patient is taught skills and strategies for dealing with relapse and future stressors. Finally, during the follow-up phase, the clinician and patient work together to monitor the patient's functioning and provide

the structure and support necessary for the patient to maintain the gains that have been made.

Previous descriptions of this approach, while recognising that the treatment of PTSD cannot be easily compartmentalised, have suggested that the phases represent a nominal hierarchy such that interventions during one phase are designed to prepare the patient to move on to other phases of treatment (Keane, 1995; Keane et al., 1994). However, we wish to emphasise that the phases identify intervention strategies that may be utilised to a greater or lesser extent at various times throughout therapy. One advantage of the phasic model of treatment is that it acknowledges that PTSD *itself* has a phasic quality (Horowitz, 1986; Keane, 1995). One often sees an exacerbation of symptoms and functional problems associated with current stressors and trauma-related cues. The specific intervention strategies used in any given session may depend on the issues most salient at the time, as well as the goals of treatment as previously determined. For example, although safety and stabilisation issues may require more attention at the early stages of therapy, when dealing with complicated cases, these issues will likely be revisited. Similarly, though relapse prevention strategies require treatment gains prior to their implementation, these techniques may be used extensively prior to exposure-based treatments in order to promote the continued use of safety and coping strategies. Thus, the phase model serves as a heuristic device rather than as a prescriptive order in which treatment should always progress.

THE IMPORTANCE OF ASSESSMENT

Initial Assessment

A comprehensive evaluation at the outset of therapy is invaluable in order to provide the information necessary to make informed clinical decisions and prioritise treatment goals. Within the present model of treatment, assessment and intervention processes are inherently intertwined; assessment does not stop when the clinician introduces an intervention. Indeed, assessment during and after a particular intervention is equally valuable for identifying new points of intervention and accounting for the client's resistance to change. Once the therapist has developed initial hypotheses regarding the patient's identified problems and has specified a point of intervention, specific cognitive behavioural techniques can be introduced. Depending on the therapist's hypotheses, traditional anxiety reduction and stress management techniques may be augmented or even supplanted with treatments aimed at addressing the broad range of issues that contribute to problems for these clients.

In complicated cases, even assessment can be problematic as the therapist is faced with the difficult task of identifying and evaluating problems at multiple levels (e.g. cognitive, emotional, behavioural), in numerous domains (e.g. social, occupational, self-care), and across varying periods of time (e.g. now, over the past week, since the trauma). For example, while engaging in exposure therapy a clinician may want to evaluate moment-to-moment fluctuations in anxiety levels, other emotions that might reduce the efficacy of exposure (Foa et al., 1995), session-to-session changes in the severity of PTSD symptoms, the level of general stressors in the patient's life, alterations in risky behaviour, and global shifts in marital or work functioning.

Keane and colleagues have detailed elsewhere the importance of a comprehensive multimodal assessment of PTSD (Keane, Wolfe & Taylor, 1987; Keane, Newman & Orsillo, 1997; Malloy, Fairbank & Keane, 1983). Assessment needs to extend beyond the evaluation of symptoms and should include the nature of the trauma, the patient's unique response to that trauma, the patient's adaptation to ongoing symptoms, multicultural issues, co-morbidity, and other factors that affect treatment (Litz et al., 1992). Clearly, this is a complex task. To illustrate the nature of such an assessment in a complicated case, let us briefly revisit the case of Mr J. In this instance, multimodal assessment might include but is not limited to:

1. A clinical interview that includes an assessment of current safety and self-care issues, an evaluation of medical, occupational, social, and legal problems, and a history of traumatic events.
2. Formal psychiatric diagnostic interviews for both PTSD (e.g. Clinician Administered PTSD Scale (CAPS): Blake et al., 1990) and general psychiatric diagnoses (e.g. Structured Clinical Interview for DSM: Spitzer & Williams, 1995).
3. A medical exam.
4. A review of relevant documents including Mr J's medical records and military history.
5. Self-report measures of psychopathology and trauma exposure such as the PTSD Checklist (Weathers et al., 1993); Symptom Checklist-90-R (SCL-90-R: Derogatis, 1983); Beck Depression Inventory (Beck et al., 1961); Beck Anxiety Inventory (Beck et al., 1988); Minnesota Multiphasic Personality Inventory (MMPI-2: Butcher et al., 1989); and the Combat Exposure Scale (Keane et al., 1989b). (For a thorough review of available measures see Solomon et al., 1996).
6. Psychophysiological assessment to evaluate Mr J.'s level of arousal in response to trauma cues (Orr & Kaloupek, 1997).
7. An interview with Mr J's wife to assess marital problems, her perception of his symptoms, and her observations of Mr J's difficulties in other areas of functioning.

Hypothesising Relationships among Problems

Based on the initial assessment, an early schematic of the interrelations among the identified problems can be developed to guide the therapist in developing hypotheses and identifying points of intervention. In the case of Mr J. the initial schematic might look something like that presented in Figure 5.1. Arrows with a solid line are drawn to illustrate that the component at the source of the arrows serves to reinforce or increase the component at its termination. Arrows with a dashed line are drawn in order to illustrate that the component at the source inhibits or reduces the component at its termination. As is readily apparent in this schematic, Mr J's case is multifaceted and has numerous interacting components. 'PTSD Symptoms,' 'Suicide,' and 'Alcohol Abuse' are placed centrally in this diagram because they are Mr J's primary presenting complaints. Their centrality is not intended to represent these psychological symptoms as the key elements on which all other problems hinge. In Mr J's case, these are only three of many issues that significantly contribute to the distress in his life.

At first glance, the diagram may look hopelessly complicated. However, careful inspection reveals that it analyses the case into its many

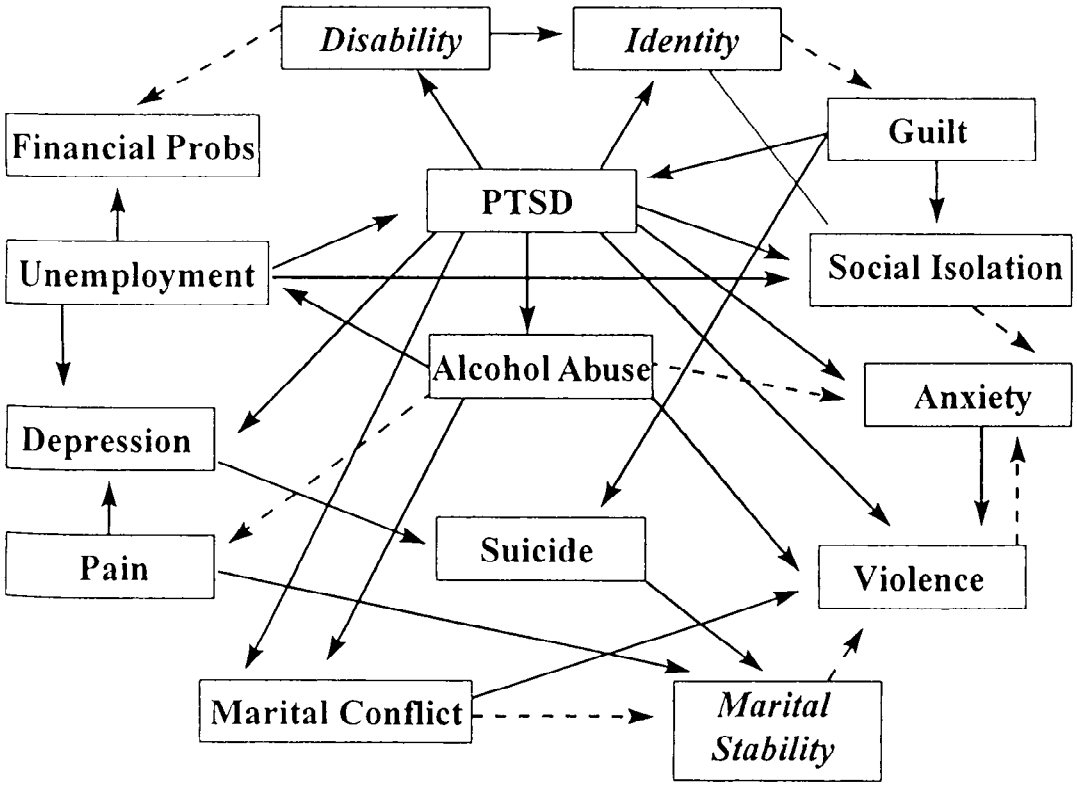

Figure 5.1 Initial schematic of the interrelations among the identified problems.

components and allows one to hypothesise how certain interventions might affect Mr J's life:

- The use of flooding or implosive therapy early in treatment, which can be associated with a period of exacerbation in PTSD symptoms, might serve to increase drinking, relationship conflict, violence, isolation, suicidal ideation, and feelings of guilt.
- Pushing for sobriety would likely cause in increase in Mr J's physical pain and PTSD symptoms while potentially decreasing violence, relationship difficulties, and financial problems.
- Decreasing marital conflict through couples or family work would likely decrease relationship conflict, alcohol intake, violence, depression and anxiety.
- The immediate initiation of anxiety management techniques may be problematic in that, in Mr J's case, trauma-related anxiety bolsters his veteran identity, gives validation for his service, and improves his finances via compensation.
- Psychopharmacological and cognitive behavioural treatments designed to decrease PTSD symptoms would ultimately lead to decreased alcohol intake, depression, violence, isolation, and guilt, but might result in the loss of veteran identity, increased financial problems at least for a time, and the eventual end to a marriage that is, in part, maintained by the wife's fear that Mr J. might kill himself.

Where to Begin: How Assessment Informs Points of Intervention

It should be clear that in such complicated cases, there are numerous avenues treatment could take. Evaluating the risks and benefits of possible interventions prior to initiating them is a key feature of treatment. In Mr J.'s case, we might consider detoxification and treatment of his substance abuse, exposure for his PTSD symptoms, marital therapy for him and his wife, skills training for anger, stress or pain management, and practical help in obtaining a job or government assistance. In addition, he might benefit from psychoeducation regarding his present condition, psychopharmacological intervention, and safety planning. Some intervention options, such as exposure, may not be appropriate given instability in a patient's life (see Litz, et al., 1990 for decision-making guidelines for direct therapeutic exposure), other options, such as inpatient detoxification, may not be viable because the patient refuses to comply with them.

A therapist needs to begin with those interventions that, based on the hypothesised relationships and informed from the initial assessment, present the greatest benefits with the least risks. In the case of Mr J., the

analysis might lead to early interventions that would emphasise decreasing marital conflict and assure the safety of all involved. Such an initiative would carry little risk and considerable reward. Based on our hypothesised relationships, we would expect that assuring safety and decreasing conflict would decrease Mr J.'s anxiety, depression, and alcohol intake as well as overall violence in the household. However, a therapist cannot assume that any given intervention will have its desired effect. In order for a therapist to refine hypotheses and proceed systematically with treatment, careful and regular assessment throughout therapy is crucial.

Ongoing assessment

Although the need for assessment does not change throughout therapy, the nature of assessment shifts as therapy progresses. First, assessment needs to become economical. Clearly, clinicians can't allocate two hours to evaluate the current status of a case. Therefore strategies to gather the most information in the shortest amount of time are needed. Second, the assessment should be discrete; assessments that are intrusive or that distract from the therapeutic task may interfere with accomplishing treatment goals. Finally, assessment must be valid; that is assessment must answer the question one is asking as it relates to the established treatment goals. A level of flexibility and creativity is necessary on the part of the therapist in order to adapt or develop measures that accurately assess progress toward the goals of treatment.

How does one develop ongoing assessments that are economic, discrete, and valid? If a clinician is able to create a therapeutic environment in which assessment is integral and ongoing, the desired qualities of assessments will evolve naturally. By engaging in assessment often, both the clinician and the client become well practised. Along with the increasing practise comes a level of economy regarding the quality and quantity of information gathered. By assessing frequently, assessments also are likely to become less intrusive. If assessments are repeatedly part of treatment, they no longer interrupt treatment but rather become extensions of it. Finally, frequent assessments increase the likelihood that a therapist will be measuring what he or she intends to be measuring by providing numerous opportunities to either adjust one's measures or to look at a given question in multiple ways.

Providing Structure to Ongoing Assessment

In cases of complicated PTSD, we have found it helpful to conceptualise assessment as occurring within a 2 x 3 matrix (see Figure 5.2) which crosses

	SYMPTOMS	INTERVENTION	KEY EVENTS
WITHIN	**Moment to Moment** How do you feel right now?	**Change w/ Intervention** How do you feel after having tried X?	**Process Issues** How do you feel toward treatment?
BETWEEN	**Week to week** How did you feel this week?	**Change w/ Intervention** How did the homework go?	**Life Events** How did your week go?

Figure 5.2 Conceptualisation of assessment as occurring within a 2× 3 matrix.

the temporal frame of assessment (within and between sessions) with three content areas (symptoms, intervention, key events). We have found that this approach is comprehensive and ultimately enhances information retrieval by providing a framework to gather the data necessary for accurate clinical decision making. By obtaining information for all six cells in this matrix, the clinician can be assured that he or she has the data to implement successful interventions.

Assessment within a session focuses on relevant data that can be obtained while the clinician is sitting with the patient. Typically, assessment within session will incorporate patient self-reports and clinician observations to evaluate events occurring in the session. Between session assessment focuses on events that occurred during the week or changes that occur session-to-session. Between session assessment typically incorporates data from self-report instruments, self-monitoring, and observational information from significant others. Given that issues both between and within session can have a significant impact on treatment and the hypothesised associations among clinical issues, it's important that the clinician conducts assessments at both levels throughout therapy.

Each temporal level of assessment incorporates evaluations in each of three content areas: symptoms, interventions, and key events (illustrated as columns in Figure 5.2). Thus, within session, the clinician will evaluate:

(i) moment-to-moment fluctuations in symptoms and emotions as they may relate to events in session; (ii) the impact, within session, of interventions on emotions, cognitions, or behaviour; and (iii) cognitive and process issues that affect treatment. Between sessions assessments focus on: (i) session-to-session fluctuations in emotions or symptoms (ii) the impact of interventions occurring between sessions on symptoms and emotions; and (iii) key events outside of therapy that have an impact on symptoms or emotions. Ideally, after any given session, a therapist should have information about all six cells. We have found it helpful to have a corresponding question for each of the six cells as a prime to begin a discussion about any of the areas of assessment. These questions are also included in Figure 5.2.

Within Session Assessment

Cell 1: 'How do you feel right now?'

Within session moment-to-moment assessment utilises a variety of indicators including ratings of anxiety or distress by the patient or clinician, observations of facial affect, subjective and objective signs of physiological reaction and other indicators that the clinician identifies as meaningful in a particular case. Subjective ratings of the patient's overall anxiety or distress can be taken quickly (i.e. SUDS ratings) to get a sense of the patient's feeling state in the presence of particular cognitions, memories, or cues. The patient's facial expressions of fear, disgust, shame, anger, sadness and pain observed by the therapist during the session can be helpful measures of emotions the patient cannot or will not verbalise. Physiological markers such as heart rate, respiration, perspiration, muscle tension, and agitation can also be used as rough indicators of the patient's arousal. Attending to moment-to-moment fluctuations in affect or behaviour as well as events and stimuli associated with such changes can provide clinicians with important data pertaining to a patient's problems.

In a case such as that of Mr J., for example, a startle or a visible stiffening during the course of therapy might reflect an increase in tension associated with a dissociative flashback or an intrusive memory. In addition, the antecedents to such a reaction, such as muffled footsteps outside the office door or criticism, can provide valuable information regarding environmental cues that lead to distress for Mr J. Take, for example, a session in which Mr J. was seen with his wife during which the therapist observed that Mr J. winced in response to his wife's criticism. Following this observation by commenting on the event can provide the therapist and patient with additional useful clinical information. In this case, the therapist might

start with a question such as 'I noticed you just winced. What just happened?' If Mr J. responds that he had a brief flash of a memory that often bothers him, the therapist now has a hypothesis to work with: criticism by Mr J.'s wife cues distressing memories. Based on this information, the therapist can plan interventions designed to break this pattern. Such interventions might include grounding techniques for Mr J., education for Mr J.'s wife, and perhaps instruction on how to improve communication and reduce criticism.

Cell 2: 'How do you feel after having tried the intervention?'

Once relevant measures for moment-to-moment assessment are established, these same indicators can be used to gauge the impact of various interventions within a session. Any number of measures can be taken prior, during, and after a specific intervention in order to evaluate changes that may have occurred as a result. In Mr J.'s case, during a flooding exercise, a therapist might want to assess his level of anxiety at different points during the session. Although it is reasonable to hypothesise that his anxiety will decrease with flooding, the therapist cannot be certain unless data are gathered. Therefore, the therapist would want to collect information about Mr J.'s level of anxiety prior to initiating the flooding exercise, during the exercise, and after flooding is completed. Reductions in reported anxiety and distress within and across flooding sessions have been suggested as evidence for the emotional processing thought necessary for recovery from PTSD (Foa & Kozak, 1986).

In contrast, if an early attempt to recount a memory was brief and associated with no change in Mr J.'s subjective anxiety, the therapist might hypothesise that Mr J. left out important elements of the memory. As in the case of moment-to-moment observations, the therapist would test this hypothesis by questioning Mr J. about the comprehensiveness of the flooding script. Additional intervention might include instructions to slow down the relating of the trauma, provide as much detail as possible, and fully experience the emotions associated with the memory. If Mr J. continues to report no feelings and provides little information during the flooding exercise, the therapist might begin to ask questions as the narrative progresses to encourage Mr J. to offer more detail. Questions such as 'Where are you now?', 'is anyone else around?,' 'What do you see/hear/smell/feel?' have proven useful in such circumstances.

Cell 3: 'How do you feel toward treatment?'

As one is evaluating the patient's response to various interventions within the course of a session, one must also be aware of process issues that may

serve as barriers to such change. Any well meaning or well planned intervention will have little impact if the patient is unwilling or unmotivated to work with the therapist to achieve change. Assessment in this cell focuses on identifying thoughts and behaviours by the patient that interfere with accomplishing agreed upon treatment goals.

There are many issues that can serve as barriers to treatment that have been loosely characterised as forms of resistance. Among the complicated cases of PTSD treated in our clinic, commonly occurring issues that hinder therapy include mistrust, anger, betrayal, hopelessness, guilt, entitlement and the perceived benefits to remaining ill (e.g. value of 'victim' identity, compensation for disability). However, the number of issues that might interfere with therapeutic intervention is probably unlimited and therapists must remain aware of these potential pitfalls. Typically, the therapist will be alerted to problems in this area by a sense that the patient's verbally stated intention and his actual behaviour are inconsistent. In other words, the patient may say that he wants to learn strategies for controlling his anger, but be unwilling to practise these strategies in session.

For example, a therapist may note that during a particular session a patient like Mr J. was not fully engaged in a cognitive restructuring exercise. The patient might mumble his responses, offer only brief replies, and spend much of the session looking around the room and avoiding eye contact. The therapist might find it helpful to bring this to Mr J.'s attention immediately, perhaps even hypothesising out loud as to the cause of the patient's behaviour, for example, that there was something about the task that he was trying to avoid. If the behaviour persists despite the patient's verbal denials, the therapist should continue to monitor the behaviour so that the therapist and patient can work toward understanding the cause of the interfering behaviour. Typically, such prompting will lead to a discussion of process issues. At times, it will be necessary for the therapist to adjust the agenda of the session to address these issues even if it requires postponing or interrupting a planned intervention. In cases where resistance persists and is seen as avoidant, then the therapist should state the reason for altering plans and provide the patient with a timetable for beginning the next planned intervention.

Between Session Assessment

Between session assessment differs from assessment within session in its focus on events that occurred outside the therapist's office and its heavy reliance on self-monitoring. Part of the strategy of between session assessment is to provide a structure that fosters accurate reporting of events that

occur during the week and encourages the patient to get into the habit of observing him or herself. It is not uncommon, particularly early in treatment, that patients will neglect to report significant events in their lives to their therapist, either because they are reluctant to discuss the event or they simply do not recognise them as important. It is for these reasons we have found it helpful to routinely ask the questions, 'How did you feel this week?', 'How did the homework go?', and 'How did your week go?' that respectively correspond with between session assessment of Cell 4 (symptoms), Cell 5 (interventions), and Cell 6 (key events).

Cell 4: 'How did you feel this week?'

Between session assessment of symptoms makes use of self-monitoring skills as well as more standardised and validated measures for PTSD or other targeted behaviours. While the more time-consuming measures will likely be used only periodically, self-monitoring typically occurs between all sessions. The identification and operationalisation of behaviours or events to be monitored may necessitate substantial education of the patient. Within session assessment of symptoms can often serve as a model for how to monitor behaviour at home and is particularly useful in identifying and discriminating when exactly a given behaviour occurs. Once a patient is able to recognise reliably the occurrence of a target event, he or she needs to systematically record them. Developing methods for self-monitoring that provide the therapist with valid information requires considerable investment on the part of the therapist.

For example, in a case such as that of Mr J., the therapist might be interested in recording baseline drinking behaviour. Therefore, accurate recording might require placing a tally sheet at any source that provides access to liquor: (i) in his wallet to count drinks at a bar; (ii) on his refrigerator; and (iii) on his liquor cabinet. In addition, recording sheets might provide room to record specific information such as date, time, type of drink (1 = beer, 2 = liquor), and number of ounces. This approach might require some further alteration if the patient does not record drinking that occurs in other situations such as at parties or over at a friend's house. Many of the in session indicators can be used as between session measures, but again one should not limit oneself to those used in session. Between session monitoring offers an opportunity to greatly expand the information base for developing hypotheses and designing interventions. We feel that it's important to reiterate that if it is meaningful and measurable it's important to monitor it.

Daily monitoring can be complemented by quick, valid, and relevant assessments of symptoms. Measures such as the PTSD Symptom Scale

(PSS-S: Foa et al., 1993) or the PTSD Checklist (PCL: Weathers et al., 1993) evaluate PTSD symptoms and can be given periodically throughout treatment in order to provide ongoing measures of symptom levels. There is no general prescription regarding when such instruments should be incorporated into the treatment but rather they should be utilised based on the current goals of treatment. For example, such instruments might be used on a weekly basis if a patient is engaged in a between session intervention at home such as relaxation exercises that might affect PTSD symptoms. These PTSD measures can be augmented with other measures that evaluate concurrent issues such as depression (BDI Beck et al., 1961) or anxiety (BAI: Beck et al., 1988). The use of such measures is important to the cognitive behavioural therapist as they accurately index gross changes in symptoms as they may relate to long-term involvement in therapy or major life events. Collaboration with the patient through plotting changes on a 'time-line' that includes significant life events that occur during the course of therapy can be an invaluable source of information to both the therapist and the patient and can provide a framework for further hypotheses and treatment.

Cell 5: 'How did the homework go?'

Asking this question each week allows the therapist and patient to monitor the patient's compliance with and response to suggested interventions. It keeps treatment focused on the interventions at hand and sets an expectation that new sets of skills need to be attempted at home as well as in the session. Plotting the accrued data in session and looking at behavioural or mood shifts associated with a given homework assignment can provide a sense of accomplishment and closure to a week's worth of self-monitoring and behavioural change. It also provides the essential information to determine the effectiveness of any given intervention as well as indicating potential adjustments that might improve treatment efficacy.

Patients who successfully complete a suggested intervention within session may have considerable difficulties when attempting to do it at home. For example, relaxation exercises that had gone smoothly during a treatment session might become problematic at home. The therapist might only become aware of this if the patient is asked directly, 'How did the relaxation exercises go?' or if the patient had monitored the relaxation intervention during the week. When describing problems with the homework, the patient may state that, 'I don't like to close my eyes when I am alone in a room' or 'I couldn't keep memories away when I tried to relax,' or ' There were just too many disruptions in my house.' At this point, the therapist would have a number of different possibilities to account for the patient's differential response at home versus in session and ideally the

therapist would systematically manipulate each of these variables to investigate the individual contribution of each. However, in order to reduce intrusions, the therapist might instruct the patient to engage in relaxation in session with his eyes open versus closed and with or without the therapist verbally instructing him in order to reduce intrusions. Once a successful format for relaxation has been found (e.g. without therapist speech and with eyes open), the patient is instructed to follow this format at home. Patient self-monitoring during the ensuing week as well as follow-up questioning at the next session will advise the therapist as to the success of the adjustments made.

Cell 6: 'How did your week go?'

The numerous answers a clinician might get to this question from week to week in complicated PTSD cases is one of the aspects that makes such cases so difficult. The relationship between symptoms and life events is ongoing and dynamic and therapists' theories of how they are related in a particular case require constant modification. Any given treatment plan can and sometimes needs to be dramatically altered based on changes in the patient's life circumstances. The same intervention, for example exposure therapy, might have a very different effect depending upon the current circumstances in the patient's life. Although such an intervention might be extremely helpful when a patient is sober, is living in a stable household, and is successfully employed, it might have quite the opposite effect if the patient is drinking, is violent towards family members, or feels s/he is about to be terminated from a job.

As stated in the introduction, patients with chronic and complicated PTSD often have problems functioning in multiple arenas in their life. It is not unusual for a patient to present with substantive life issues such as homelessness, financial difficulties, relationship problems, custody issues, legal troubles, health problems, poor access to health care, and high-risk living arrangements. In such cases, it is common for crises to arise in one or more of these problem areas throughout treatment. When a crisis occurs, it is not unusual for the treatment to shift toward stabilisation issues while temporarily pushing aside planned treatment interventions. Such shifts are inherent to the treatment of complex cases and recognition that destabilising events will impinge on therapy at various times will minimise frustration for the therapist.

However, crises and subsequent moves toward stabilisation are not mutually exclusive with continuing planned interventions. Changes in life circumstances may require modifications in treatment plans but not necessarily so—it all depends on how likely the event is to affect the out-

come of the intervention. If an event does not detrimentally affect a given plan, and all that can be done has been done to stabilise the situation (i.e. assessment, safety plan, appropriate referral), then the clinician should proceed as soon as possible to implement the intervention. Such an effort is important for a number of reasons: it keeps the treatment moving forward, it prevents the patient from feeling as if they are failing in some way, and it does not permit avoidance.

MULTIDISCIPLINARY TREATMENT

Clearly, the treatment of PTSD can be complicated. We have attempted to simplify the discussion by focusing primarily on the role of the psychotherapist in the treatment of these cases. However, complex patients typically present a range of problems that may require intervention by other professionals. For example, a psychiatrist may be required to prescribe and monitor psychopharmacological treatment and other physicians may be necessary to treat physical ailments that often accompany PTSD. Substance abuse specialists also may be involved in the case to address issues that fall within their areas of expertise. Social workers may be required to assist with access to essential social services. In addition to the participation of other professionals, treatment of PTSD may require interventions that fall within specialised areas of psychotherapy such as marital therapy or communication skills that might best be provided by therapists with particular training. Although there are obvious advantages to involving multiple professionals in the care of complicated cases, this approach also has some liabilities.

The involvement of multiple providers in the treatment of PTSD patients can exacerbate problems found in this population. In particular, the issues of vulnerability, shame, trust, and distress associated with repeated disclosure of trauma information can be problematic. For example, the fact that multiple professionals are aware of the details of the traumatic event may increase the patient's sense of vulnerability. Similarly, the sharing of information among the treatment providers that is so necessary for coordinated treatment may be perceived by the patient as a violation of trust. In our experience, poor compliance with multidisciplinary treatment stems from a failure of the professionals to address these issues and prepare patients for treatment. When such issues are not addressed, patients tend to comply only with those treatments that seem most palliative.

One possible solution to the problems associated with multidisciplinary treatment of complicated PTSD cases is an integrated clinic within which these patients can be treated by treatment teams. When a PTSD patient is

admitted to this clinic, it is clear that the treatment will involve all appropriate members of the team and that information will be shared among the providers. Thus, from the beginning the patient is aware that information will be shared to improve treatment, not to violate their trust. Further, by openly sharing information among providers it is possible to reduce the number of times the patient is required to repeat information. The presence of medical, mental health, and social service providers within the clinic also allows for easy consultation within and across disciplines. Within this clinic, the therapist serves as one integral part of the total treatment team. In some cases, the therapist serves as the primary provider for a patient, conducting therapy and coordinating care with other providers. In other cases, the therapist provides short-term problem-focused treatment within their specialty (e.g. family therapy) for patients for whom they are not the primary clinician. In still other cases, the therapist may provide consultation to other primary providers. In complicated cases of PTSD, where numerous professionals are likely to be involved, an appropriate referral to a local clinic with comprehensive services is sometimes the most appropriate first step towards good treatment.

CONCLUSION

In this chapter, we have outlined a cognitive behavioural approach to complicated cases of PTSD. We have attempted to a provide a framework for treatment that is comprehensive and highly personalised and thus able to address the heterogeneous presentations of the disorder. Attempting to provide such a framework has led us to acknowledge the phasic nature of the disorder and its treatment, the role of ongoing assessment in determining points of intervention, and the advantages of treatment in the context of a multidisciplinary clinic. Good treatment of complicated cases of PTSD is never simple; rather, it requires a sensitive clinician, knowledgeable about the disorder, and systematic in his or her application of assessment and treatment regimens. As more randomised clinical trials are completed in the area of PTSD, the selective inclusion of effective treatment techniques into this larger treatment framework will yield improved outcomes even for the most complicated cases.

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